

Ecotourism and Empowerment: A Case Analysis of Bhitarkanika Wildlife Sanctuary, Odisha, India

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Abstract

Ecotourism is a type of sustainable tourism that aims at conservation of the environment through development of the indigenous communities. Development of the communities not only refers to economic development, but also to social as well as cultural development. The present study is an attempt to address the socio-cultural impact of ecotourism to the locals in Bhitarkanika Wildlife Sanctuary (BKWS), Odisha, which is an important ecotourism site in India for its rich and varied biodiversity. Through a case analysis, the study endeavours to find out whether ecotourism has been able to empower the locals socially as well culturally. The study finds that ecotourism has come as an economic rescuer for many people who do not have a wide avenue of earning. With the creation of employment opportunities, locals have been made aware of participation in community development programme. Several institutions such as eco-development committees (EDCs) have come up in adjacent villages, and locals are made members of EDCs. However, these EDCs have not been very effective to empower the locals because of their lack of education and skill. From community participation to education and skill development, from infrastructure to awareness campaigns, there is a lot of effort needed by the government. Thus, proper policies are to be formulated for an inclusive ecotourism approach in BKWS, one which is socio-economically effective, culturally advanced and environmentally sustainable.

Keywords

Ecotourism, social empowerment, Bhitarkanika Wildlife Sanctuary, community participation

Introduction

Poverty and biodiversity degradation are two related significant challenges that the present century experiences. Ecotourism as a type of sustainable tourism is considered to be a panacea for both these global concerns.¹ From the 1990s onwards, ecotourism became an alternative approach in the regime of biodiversity conservation. The underlying argument is that the financially poor people depend highly on biodiversity for their sustenance, and hence, conservation of biodiversity can only be successful if measures like ecotourism address poverty elimination appropriately. Broadly speaking, it contributes to the conservation of protected areas by: (a) generating

revenues that can be used to sustainably manage protected areas, (b) providing local employment, and (c) inculcating a sense of community ownership (Jalani, 2012).

Worldwide, conservationists have promoted ecotourism as an integral tool of conservation of natural resources and development of indigenous communities (Stronza, 2007). Many countries and regions which are rich in biodiversity and poor in economy have been vigorously promoting ecotourism as a conservation tool since the 1990s (He et al., 2008). The most interesting aspect of ecotourism is that it aims at conservation not only through economic development of the locals, but also through their socio-cultural empowerment. Since the overall quality of life of the host population is a combination of economic,

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social and cultural dimensions (Wilkinson & Pratiwi, 1995), ecotourism in order to be sustainable does not only need to be economically sustainable; but it also has to be socially sustainable (Scheyvens, 1999) and culturally appropriate (Mbaiwa, 2003).

Economic benefits from ecotourism constitute an essential facet for success of ecotourism. Generally, the wildlife areas and national parks that constitute a significant market for ecotourism are located in places characterized by poor infrastructure, lack of industries, less education, lack of skill and so on (Goodwin, 2002). In such places, ecotourism is being embraced as a potential economic rescuer by many rural communities that are motivated by the promises of jobs, new business opportunities, skill development and so on (Scheyvens, 2000). Development of ecotourism will create jobs in tourism services such as restaurants, souvenir shops, eco-lodges, campsites, home stay accommodations, restaurants, transport and guiding services, and will provide economic benefits directly to local people (Reimer & Walter, 2013). Moreover, development of ecotourism leads to the creation of production systems related to goods and services linked to tourism such as local handicrafts, agriculture and services, stemming from the high-level of consumption of these products by tourists. Respondents, who are affiliated with ecotourism-related livelihood, perceived that the positive impact of ecotourism is primarily seen in the development of their livelihood. People changed their occupation from fishing and non-timber wood usage to ecotourism activities, as tourism provided higher income (Jalani, 2012).

Conversely, in many studies, it has been noticed that the economic benefit from ecotourism is significantly affected by limited avenues for the locals to earn decently (Goodwin, 2002), higher leakage of income (Stronza & Gordillo, 2008) and inequitable distribution of income (Coria & Calfucura, 2012). On one hand, there are limited work opportunities for the villagers as the sanctuary cannot provide employment to all, and on the other hand, most of them end up in getting low-paid jobs as they lack required skill, education and bargaining power. But the cost of establishment of the park is faced by all in terms of restrictions in access to forest, damage to crops by wildlife, loss of life and livestock and so on. Additionally, income earned from ecotourism can also have a negative effect on conservation when locals use these increased incomes to buy modern equipment for foraging, hunting and so on (Stronza, 2007).² It is more or less because with the meagre income, villagers cannot meet their needs and thus depend on forest resources without thinking of its sustainability. Over the period of time, therefore, it has been experienced that neither 'gun and guard' approach nor simply generation of economic benefit approach can work towards the

conservation of biodiversity. It is the non-economic ones such as community empowerment (Scheyvens, 1999) that often influence conservation to a greater extent than the conventional and economic approaches.

Community members can be empowered through their involvement or participation (Stone et al., 2008). As the locals work in ecotourism-related activities, they gradually develop an interest to participate in community-centric programmes such as Joint Forest Management (JFM), EDC and so on. Community participation enables them to live in harmony and leads to social empowerment. Scheyvens (2000, p. 241) describes social empowerment as '... a situation in which a community's sense of cohesion and integrity has been confirmed or strengthened by an activity such as ecotourism'. Wunder (2000) finds that ecotourism income helps to unite actors and strengthen the reason for coexistence.³ Broadly speaking, participation is not only related to involvement in employment opportunities; what is more important is equal participation of stakeholders in decision-making, and such membership in decision-making process empowers them (Mbaiwa, 2003; Tosun, 2000). In this way, economic benefits coupled with social empowerment lead to psychological empowerment, as the indigenous communities start appreciating the unique cultural and natural resources and traditional knowledge that they possess (Nyaupane & Poudel, 2011). As a result, the locals develop a sense of pride in and awareness of the importance of their natural resources (Wearing & Larsen, 1996).

Shared income among community members also helps improve local livelihoods by providing infrastructure, education and health. With the increase in the number of ecotourists, transportation and communication system is improved to facilitate them. Ross and Wall (1999) discover improvement in road facilities in two protected areas in Hainan, China. In a study of at the Sundarban Tiger Reserve, India, Guha and Ghosh (2007) find that a part of increased income from ecotourism practices is used to finance the education of the children which will lead to development of human capital. In the case of Siyabonga Craft Cooperative in KwaZulu-Natal, South Africa, women participation in ecotourism related activities has motivated them to go back to school as well as send their children to schools (Scheyvens, 2000). Women participation in ecotourism-related activities not only enables them to earn decently, but also develops their awareness of health and hygiene.

Thus, there exists an interlinkage among economic, social and cultural dimensions, and a symbiotic relationship among them helps in biodiversity conservation. Therefore, Moore (1996) also opines that from a development perspective, ecotourism endeavours should only be

considered 'successful' if they promote empowerment, with host communities having some control over its development and sharing equitably any benefits from it, rather than focusing only on providing economic gain.

The present article addresses these interlinked issues of economic and socio-cultural impact of ecotourism activities. Specifically, the article attempts to examine (a) empowerment of locals and their pride in culture through ecotourism activities and (b) infrastructure development and its perceived benefit by the locals as a result of ecotourism. The study is carried out in BKWS, Odisha, which is the second largest mangrove ecosystem in India.

Ecotourism being a new venture in BKWS is a less researched aspect in literature in terms of its potential impact. Most of the research carried in this area is focused on its unique biodiversity, benefits of mangroves forests and so on (Badola & Hussain, 2005; Mishra, Sahu & Upadhyay, 2005). BKWS with its rich biodiversity is gradually becoming an ecotourist's paradise. Ecotourism as a policy in such a unique landscape can only be successful when the host communities of the place are actively involved in the policy. Thus, to examine peoples' participation in ecotourism activities and thereby to assess their level of empowerment in such a distinctive area is highly essential.

The success of the conservation policy like ecotourism depends on its overall effect on the livelihood of the people. In the context of BKWS, the sanctuary is surrounded by 410 villages and a large number of people are dependent on the forest resources for their sustainability. Before the declaration of the wildlife sanctuary, poaching of wild animals, cutting trees for firewood, timber, fencing materials, agricultural implements, boat making, house construction, thatching by phoenix leaves, collecting honey and so on were rampant which led to degradation of the forests as well as decrease in the number of wild animals. Even after the declaration of the sanctuary, permissions were granted to the villagers for collection of fuelwood, honey and so on. But with the declaration of the national park, all such permits have been banned, thus, creating more difficulties for the villagers who used to sustain themselves by subsistence agriculture, fishing and forest resources. Unless the local communities perceive an improved condition, they will not restrict the illegal use of resources. As it is not possible for the authorities to provide economic benefits to such a large population, non-economic benefits such as improved infrastructure will certainly help in compensating the benefits foregone. Thus, examining the impact of ecotourism on infrastructure development of the area will help to assess the magnitude of social benefits to the locals as well as the problems associated with the promotion of ecotourism.

In many protected areas, it has been found by different researchers that in the process of generating revenues, locals face the problem due to increase in tourists as an increase in tourists often leads to crime, begging, prostitution, alcoholism and so on (Das & Chatterjee, 2015). In many instances, it is also noted that the bureaucratic nature of the forests does not allow locals to participate in the planning process (Banerjee, 2010). In such cases, creating employment opportunities for few cannot lead to complete support from the local villagers. Thus, assessing the socio-cultural impact of ecotourism activities will facilitate policy-makers to make more informed and balanced decisions, and also to adjust policies on ecotourism development at BKWS, a growing ecotourism destination, to achieve biodiversity conservation.

The article is organized as follows. The following section discusses the study area and methodology of the study. In the next section, results and discussion are presented. Finally, the last section concludes the article.

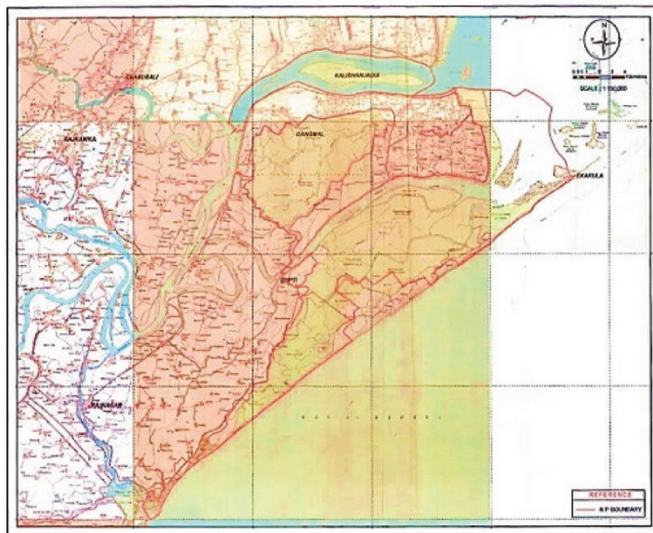
Study Area and Methodology

Study Area

BKWS, located in the Kendrapara district of Odisha in eastern India, spread over an area of 672 sq. km, has been selected as the study region owing to its significance within the ecotourism map of India. The sanctuary lays in the river delta of Brahmani, Baitarani and Dhamra rivers, and is the second largest mangrove ecosystem in India after the Sundarbans of West Bengal. An area of 145 sq. km has been notified as Bhitarkanika National Park vide Notification No. 19686/F & E dated 16 September 1998 of Forest and Environment Department, Government of Odisha. The biodiversity of Bhitarkanika is unique and incomparable in the country. Out of the 72 mangrove and associated species found world over, Bhitarkanika houses 62 of them. The faunal diversity in Bhitarkanika is represented by 42 species of reptiles, 5 species of amphibians, 280 species of birds and 28 species of mammals. Salt water crocodile (*Crocodilus Porosus*) is the flagship species of Bhitarkanika (Figure 1).

Recent report in the Guinness Book of world records suggests that the largest living crocodile in the world is found in Bhitarkanika. Besides the estuarine crocodile, the sanctuary is rich in avifauna, mammalian and reptilian population like King Cobra, Indian Python and Water Monitor Lizard. The avian diversity of Bhitarkanika is unique. As many as 280 species have been reported from the sanctuary area. Both resident and migratory birds use this mangrove wetland in some or the other part of the

MAP OF BHITARKANIKA NATIONAL PARK ON TOPO-SHEET 1975
MANGROVE FOREST DIVISION (WL) RAJNAGAR



MAP OF BHITARKANIKA SANCTUARY
MANGROVE FOREST DIVISION (WL) RAJNAGAR

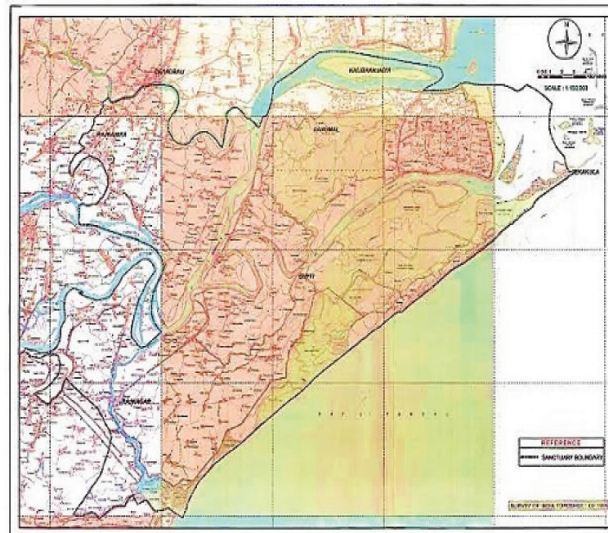


Figure 1. Bhitarkanika Wildlife Sanctuary and National Park

Source: Mangrove Forest Division (WL), Rajanagar, Kendrapara, Odisha

year. Bagagahan heronry is the largest in Asia according to some sources. About 30,000 resident water birds nest in a compact area of 4 ha. The park attracts about 1 00,000 migratory birds during winter. For its rich avifauna, it was declared as a 'Ramsar Site' on 19 August 2002.

Selection of the Sample and Data Collection

The study examines primary data, though it is based on a case study approach. The primary data is collected by using multi-stage sampling technique, as the sampling is carried out at block-level, village-level and household-level. In the first stage, the blocks—Rajanagar, Rajakanika of the Kendrapara district and Chandbali of Bhadrak district are chosen. BKWS is spread over the Rajanagar and Rajakanika blocks of the Kendrapara district. While the sanctuary covers the total Rajanagar block, a part of Rajakanika comes in the sanctuary. Previously, the headquarter of the forest division was at Chandbali, Bhadrak which has now shifted to Rajanagar, Kendrapara, and so, a large number of ecotourism participants reside at Chandbali. In the second stage, cluster sampling technique is used to identify relatively homogenous villages adjoining the national park for a comprehensive study. Accordingly, the villages from Dangamal, Iswarpur, Talachua, Rangani, Rajanagar, gram panchayats of Rajanagar block and Jayanagar, gram panchayat of Rajakanika block, Chandbali village of Chandbali block are selected. Sample sizes of 42 villages representing 10 per cent of the total villages are selected

for the intensive study. In the third stage, from the villages, the ecotourism participants and non-participants are selected based on their fair availability during the interview. The reason for collecting data from two sets of participants is to obtain a clear picture about their perception of the benefits of ecotourism. The secondary data are collected from the office of Mangrove Forest Division (WL), Rajanagar, Kendrapara, Odisha. The details of the samples studied are presented in Table 1.

Interviews are conducted between February 2014 and June 2014 as dry season facilitates better mobility. A pilot study was conducted in the month of January 2014 to finalize the questionnaire. For carrying out these interviews and for recording the collected information, a standard schedule of questions was used. All the interviews are conducted in Odia language in order to ensure locally relevant answers to the questionnaire.⁴ Focus group discussions are conducted to assimilate better information.

Methodology

Information on the general background, socio-economic aspects of the household including education, income and expenditure is collected. The respondents are asked about their participation in community meetings, awareness programme, frequency of their participation and benefits of participation. They are also asked about their association with any kind of institutions such as EDCs, Self-help groups (SHGs), Vana Surakhsha Samiti (VSS), JFM or any

Table 1. Selection of the Villages and Respondents for Intensive Sampling

Cluster	Name of the Villages	Number of Villages in the Cluster	Number of Villages Studied	Number of Non-ecotourism Participants	% of the Non-ecotourism Respondents	Number of Ecotourism Participants	% of the Ecotourism Respondents
1	Dangamal	18	12	36	22.50	41	26.45
	Iswardpur	23	8	32	20.00	23	14.84
	Rajnagar	13	1	2	1.25	3	1.94
-2	Talachua	18	7	22	13.75	2	1.29
	Rangani	18	3	16	10.00	0	0.00
3	Satbhaya	18	2	13	8.13	9	5.81
	Gupti	19	6	17	10.63	41	26.45
4	Jayanagar	11	3	16	10.00	23	14.84
5	Chandbali	9	1	6	3.75	13	8.39
Total numbers			43	160	100.00	155	100.00

Source: Primary Survey.

village-level institutions that work towards the conservation of natural resources.

A case study method is used for an elaborative study to examine the impact of ecotourism in terms of social empowerment. Following the literature, social empowerment will be analyzed in line with the degree of participation of the locals in different institutions related to ecotourism, participation in capacity-building programme, benefits that they perceive from their participation, change in community cohesion and integrity because of ecotourism, development in infrastructure and promotion of culture.

Ecotourism in BKWS: An Analysis

Ecotourism has gained momentum in BKWS for its unique ecosystem. The lush green mangroves, twisting rivers and creeks, frightening estuarine crocodiles, the

docile spotted deer, nesting birds at Bagagahan, large number of mud skippers, nature trail at Dangamal, historic shooting tower, ancient Siva temple and lotus pond at Bhitarkanika and so on have become the centres of attraction for the tourists (Figure 2).

Ecotourism as a policy has been introduced in the era of the 1990s, when the degradation of biodiversity and natural resources increased and intervention became critical. The major objective of ecotourism in BKWS is to conserve biodiversity through improved livelihoods of the villagers. After around two decades, the hotspot is doing really well now in terms of tourism business. Recently, the park witnessed an increase in the flow of visitors for its rich scenic beauty (Table 2).

The economy of the nearby villages of Bhitarkanika is characterized by remoteness, absence of electricity and industry, very little development in terms of infrastructure, communication, market and so on. Villagers have little



Figure 2. Glimpses of BKWS

Source: Primary survey.

Table 2. Visitor Flow and Revenue Collected

Year	Number of Tourists			Revenue Collected (₹)
	Indian	Foreigner	Total	
2008–09	36,792	288	37,080	1,263,479
2009–10	45,178	249	45,427	1,119,696
2010–11	48,972	300	49,272	1,586,383
2011–12	39,295	275	39,570	1,386,868
2012–13	46,714	203	46,917	1,548,989

Source: Mangrove Forest Division (WL), Rajanagar, Kendrapara, Odisha.

Table 3. Work Opportunities Created by Ecotourism in BKWS

Inside Park	Outside Park
<ul style="list-style-type: none"> • Wages from employment in the park (patrolling staff, plantation worker, gatekeeper, boat drivers) • Eco-development run enterprise (souvenir shop, canteen, eco-lodges) • Professionals like eco-guides • Temporary workers for park-related construction and other development activities 	<ul style="list-style-type: none"> • Self-run enterprises like lodge, restaurants, transport • Wages from employment in lodges, restaurants, transport • Wages from nursery development activities • Wages from parking fees

Source: Primary survey.

occupational choice other than agriculture and fishing. Introduction of ecotourism has undoubtedly opened up different avenues of employment opportunities for the villagers in such a remote area (Table 3).

With different job opportunities for the villagers, ecotourism has definitely come as an economic rescuer for many people who do not have a wide avenue of earning due to lack of infrastructure, resources, education, training and so on. Moreover, it also helps the villagers to work from home, giving them an overall psychological well-being. As ecotourism is more than simple job creation, the

policy in BKWS is also trying best to include more people in the policy. Consistent with the creation of employment opportunities in ecotourism-related activities, different institutions have been formed by the forest department to create awareness among people. Institutions such as EDCs have been formed in the adjacent villages. The adjacent Dangamal gram panchayat has eight EDCs. The objective of EDCs is to help locals develop skill, so that they can earn substantially and can reduce their dependency on the forests (Figure 3).

According to the JFM Resolution of India-2011, EDCs are constituted for protected areas and sanctuaries. Like VSS, EDCs are also a form of participatory forest management mode in case of protected areas and sanctuaries where local people participate and actively cooperate in the conservation process. As per the report of the forest department, 30 EDCs have been formed around the national park area, and incentives for alternative livelihood are given in form of training on various vocations to wean away peoples’ dependence on the biological resources of the protected area.⁵ With the support of the forest department, EDCs have organized a number of training programmes such as tailoring, coconut cultivation, duckery, aquaculture, health camps for cattle immunization and so on for the villagers. The department had also distributed honey boxes, solar *chullahs*, poultry and so on to the locals. Although the major objective of all such programmes is to reduce forest dependency of the locals as well as gain their support for conservation, they are not organized continuously. All such programmes were organized around a decade back, and the only continuing programme by EDC is roadside plantation. While the villagers blame about the apathy of the forest department to hold such programmes regularly, the department claims that the villagers have a tendency to depend on the department permanently.



Figure 3. Awareness Posters in BKWS

Source: Primary survey.

Yet, as per the survey in BKWS, only 21 per cent of ecotourism participants and 9 per cent of non-ecotourism participants are members of EDCs. In the survey, a large chunk of the ecotourism participants revealed that because of their busy work schedule, they do not find time for EDC-related activities. Mr Khageswar Behera, a part time employee of BKWS, shares *Kamaru phursat nahi, sabha ku jai kana karibu?* (There is so much pressure at work. What will we do in the meeting?). Even more questioning with the villagers revealed that in most of the cases, EDCs were formed long back, and because of lack of proper monitoring, the committees are only there for namesake. For the non-ecotourism participants, creation of protected area has done more harm due to the ban on collection of resources, and thus, they do not find any interest in all such activities. Even when they participate, they consider that the structural problems in operation such as the bureaucratic attitude of the forest department to consider them as equal stakeholders act as hurdles for effective participation. Mr Sarbeswar Pradhan, a senior citizen in Dangamal village, reveals *forest bala ta manamukhi kama kale. Amaku kie pachare?* (The department never considers the villagers. It works according to its own wish).

As per the resolution of JFM-2011, EDCs must be formed in each forest fringe villages, where all the adults of the villages will be the members. However in case of BKWS, even all the ecotourism participants who are from forest fringe villages are not members of EDCs. The Bhitarkanika Ecotourism and Eco-development Society (BEES), which is a registered society, has chief wildlife warden, divisional forest officer, honorary wildlife warden and few local people as its members. The society is responsible for managing the eco-cottages, restaurants that operate inside the park, plantation programme inside the park as well as roadside plantation. Few training programmes are organized for the locals so as to fit them to work as caretakers of these tourist-based facilities, and to help in the plantation programme. As per the interview with the department, general body meeting is done in every two years; although as per the JFM act, it should be held in every six months. The surprising fact is that the local members do not have any idea about its operation, budget, transaction and so on. All the decisions are taken at the higher end, and are executed accordingly. After the formation of BEES, the cottage fees have been increased from ₹ 200 to ₹ 1,000 per night, for a family of two. But the local members are unaware about the division of utilization of the money received from the tourists. Mr Binod Jena who acts as a caretaker of the cottages articulates *Tourist mane ete paisa dauchanti, kana hauchi ame kichi janinu. Amaku kehi kichi janantini.* (We do not have any idea about monetary transactions. No body from the

department ever informs us). Lack of clear-cut definition of the roles of the members and lack of proper information hinders the coordination for participatory tourism development approach.

Apart from EDCs, in BKWS, women SHGs are very common in all villages. All villages have more than one such SHG that are promoted under 'Mission Shakti' programme launched in March 2001 in Odisha. The major objectives of SHGs include: (a) sustainable access to financial services, (b) strong livelihood support systems, (c) enhancement of collective bargaining power, (d) self-reliance and sense of dignity, and (e) improvement in overall standard of living and empowerment (Rath, 2007).

The forest department has no contribution in the promotion and development of women SHGs in BKWS. The only reason for the existence of a large number of SHGs in each village is that it is the easiest way of getting credit from rural banks such as Odisha Gramya Bank (OGB). The SHGs are initially required to open an account in the bank, and after six months, they are entitled to get loans at a subsidized rate of interest of 13.75 per cent. Per head saving in almost all SHGs is found to vary from ₹ 50 to ₹ 100 per month. An SHG member claimed that *Agaru kichi sanchay karu na thilli. Ebe antata masaku 100 tanka karuchi.* (Previously there was no saving. At least now I can save ₹ 100 per month). Another member said *SHG na thille ame kebe sanchay kari pari na thantu.* (Had there been no SHG, we could have never been able to save). Most of the SHGs consist of eight to ten members who meet at regular intervals and keep a note of the minutes in meeting. But a close examination of the activities reveals that the objective of women empowerment through SHGs is far from their reach. To some extent, their exposure has increased in terms of going to banks and regular meetings, but that does not constitute as women empowerment as most of them lack even voice in their family decisions.

The forest department had initially realized that women empowerment through different vocational trainings could go a long way for conservation, as they are the ones who venture into the forest and collect resources illegally. Vocational trainings like tailoring, paper bag production and basket making were given to the women of the adjacent villages, long back. But as most of them lack education and skill, they could not reap the benefit from all such training programmes. At present, there is even no specific programme for women by the forest department. Moreover, lack of infrastructure such as market facilities and transport facilities to take the products to market for selling the products and lack of leisure to utilize for productive purpose added to the worries. The consequence is that a large chunk of women is still involved in illegal

practices such as collecting fuelwood and timber from forests for the sustenance of their family.

However, certain men SHGs in BKWS are promoted by Integrated Coastal Zone Management Project (ICZMP). ICZMP is an integrated approach of Ministry of Forest and Environment, Government of India, the World Bank and Government of Odisha for the sustainable management and usages of coastal resources maintaining the natural environment.⁶ An interview with an ICZMP-promoted SHG conveys that the project takes care of entire process—starting from providing capital to sales of goods. So, the men SHGs do fairer compared to the women SHGs. As the members receive some economic incentives through these activities, their dependencies on the forests have been reduced to a large extent.

A focus group discussion with the participants and non-participants of ecotourism about the benefits of participation in different institutions majorly focuses on community cohesion and bonding. While the participants to some extent are happy because of the ongoing activities, the non-participants have quite an antagonistic attitude towards the authorities. Nevertheless, both the groups agree that these institutions need to labour for development of skill and capability of the villagers, involving the villagers in policy programme, dissemination of proper information to the villagers, more awareness camps in the villages and so on. They emphasize that a top-down approach of the department will definitely yield a successful conservation policy.

As per the villagers, an important assistance that ecotourism has provided to the locals is the development of infrastructure and communication. The villagers residing along the main road (gram panchayats of Dangamal, Iswarpur, Gupti, Rajanagar) leading in through the national park are happier because of the *pukka* road that has been built recently. Even ecotourism has also brought a major change in the society in terms of education of children. Every participant ensures that their children will go to school and get good education. The Sarva Shiksha Abhiyan for education for all and mid-day meal are also a factor, but nevertheless, ecotourism has created awareness related to education amongst the villagers.

Around the several steps of development, there is a lot more effort that is required as per the suggestions of the villagers irrespective of their participation. From infrastructure to sanitation, from community participation to community awareness, ecotourism in BKWS still requires some rigorous policy formulation. For example, in the gram panchayats of Rajnagar block—Rangani, Talachua, Satabhaya—locals still face problem because of *kuccha* road facilities. Their problem is worsened during the rainy season. Many villagers have complained that *Forest*

department rasta karei dau nahanti. (The forest department is not allowing for constructing the road). In an interview with the forest department, it is revealed that the construction of road will disturb the wildlife and their habitat, and thus, they are not allowing it. The officers also said that the construction of a road from Okilpal to Satbhaya through the national park is not legally possible.

Considering these conflicts between the locals and the forest authorities, empowerment of villagers in BKWS is in a stage of infancy.

The forest department has often relied on organizing awareness camps for the local communities to reduce the degree of conflict as well as to aware them of their valuable natural resources. Other organizations such as ICZMP, Nature's club, Chale Chalo and so on are also working along with the forest department inside BKWS for organizing awareness campaigns about conservation. Posters of giant wild animals are displayed in adjacent villages which will serve the dual purpose: (a) people will be aware of the animals that attract so many tourists and (b) they will be careful about not entering in forests illegally. Regular camps are done for school children who often come to BKWS on weekends for orientation programme.

However, while examining the efficiency of the awareness camps, it has not been found very efficient by the researcher. Many villagers have rhetorically questioned the researcher *kana pain ete loka asuchanti? Ethi achi kana?* (What is here that so many tourists come?), *Ame park bhitaraku kebe jainu. Janinu sethi kana achi?* (We do not know much about the animals. We have never gone inside park), *Khali ta kumbhira au sei manaka pain ama upare ete atyachara* (There are only crocodiles in park and for them why to create ban for us), *Sarakar kumbhira ku manisa tharu besi sneha karanti* (This seems crocodiles are dearer to government than us).

According to the primary survey, 43 per cent of the ecotourism participants and only 16 per cent of the non-ecotourism participants have taken part in the awareness campaigns. The figure apparently shows that even the ecotourism participants are not made aware of the rich resources that the place has and the significance of conservation of such resources. It is only through their long involvement in the ecotourism activities that they have developed certain affinity towards the conservation of natural resources. Moreover, the irregularity in hosting the campaigns adds to the problem. While probing into the benefit of the awareness camps, 41 per cent of the ecotourism participants consider that those awareness camps help in social awareness. But only 15 per cent of the non-ecotourism participants consider that it helps in creating social awareness. Among the ecotourism participants,

20 per cent consider that participation in awareness programme enables them to participate in community programme, and thus, develop a good relation with the locals. But among the non-ecotourism participants, the percentage is only 6 per cent. On the other hand, the cost of ecotourism in terms of human-wildlife conflict is spread. Thus, the non-ecotourism participants still could not support the conservation policy wholeheartedly as it not only imposes restrictions on their access to resources, but also yields several losses such as crop loss, livestock loss, life loss and so on.

Finally, a discussion with the respondents about an increase in the number of tourists reveals that they are happy and take pride as their place is becoming famous in the world map. Rising prices of few tourist-demanded items during peak season and increase in liquor are the problems that the villagers face. The researcher has noticed that two liquor shops are just close to the national park. Even the caretakers of the eco-cottages have revealed that tourists come with liquor bottles, although consumption of alcohol is banned inside the national park. This divulges that a majority of tourists are not ecotourists who visit the place only for fun. In the absence of tourist interpretation centre, such tourists cause problems to wildlife, to the employees as well as to the park. One also finds garbage littering inside the park, dumping liquor bottles in different corners of jetties and so on. The boatmen particularly complained that in many cases, Indian tourists basically compel them to move closer to the wild animals. They also tell that 'Those who come in the off season often cannot see crocodiles. And if they cannot see crocodiles, then they simply use foul words about the park and about us'. Many of them also complained that sometimes they lose their license by the forest department when something is found with the tourists. As per them, 'How can we check the bags of the tourist? Besides, it is not possible for us to check the bag of the ladies. When we start the journey we try to explain everything to the tourists. But if they do not listen, why should we be penalized?' The forest department claims that the problems occur mostly with the Indian tourists and not with the foreign ones.

Thus, from the results and discussions, it is evident that ecotourism in BKWS is in nascent stage. Although it has tried to provide economic benefits to the host communities through employment and income earning opportunities, in terms of social aspect, it needs to improve a lot. From community participation to education and skill development, from infrastructure to medical facilities, there is a lot of effort needed by the government. Formation of EDCs or distributing few items will not solve the problem in an area where most of the community members do not have the means to become entrepreneurs. Proper aware-

ness campaigns about conservation practices, formation of more EDCs at all adjoining villages instead of concentrating on the nearest ones, encouragement to the EDCs through some incentives or prize system, developing a healthy relationship with the local communities, meeting the villagers at regular intervals, trying to listen to their problems and helping them and monitoring the ongoing programme at different villages level can help in boosting the confidence of the locals in the forest department. The policy-makers must make an effort to motivate more number of locals to participate in ecotourism-related activities through a bottom design approach, vocational and skill development training and so on. Once people receive socio-cultural incentives from ecotourism which can be more widespread than economic incentives, their dependence on natural resources will be reduced and they will realize the value of their natural resources. A fortress model of conservation which involves a strict policy for human activities is always criticized (Youdelis, 2013). Thus, the department should come out of the walls of stricter policies, as often the strict discipline entails the problems. Rather, it should encourage villagers to join hands with them to achieve a bigger goal like conservation.

Conclusion

Ecotourism aims at the conservation of natural resources through socio-economic development of the indigenous communities. The protected areas such as wildlife sanctuaries and national parks are formed in remote areas where the locals depend on the natural resources for their sustenance. The policy-makers must realize that a gun and guard approach is not at all an effective policy in restricting the dependency of people on the natural resources. It might help in short run; but to achieve a long run objective, conservation practices should try to maintain the balance between resource preservation and development of indigenous communities. Development of the locals not only implies economic development, but also social and cultural development. The experiences of ecotourism in BKWS reveal that as a new venture in BKWS, it is still in nascent stage. Although it has been able to create employment opportunities for the locals and is partly able to improve the standard of living of the participants; but in terms of social empowerment through community participation, community cohesion, infrastructure development and cultural awareness, it needs to devise better and rigorous policies. Thus, one looks forward to an inclusive ecotourism approach in BKWS; one which is socio-economically effective, culturally advanced and environmentally sustainable.

Notes

1. The International Ecotourism Society (TIES) 1991 defines ecotourism as 'responsible travel to natural areas that conserves the environment and improves the welfare of the local people'.
2. Stronza's study (2007) is on Posada Amazonas, Peru, the ecotourism site that has earned many acclaims for linking conservation with business and community development. It has been experienced that while few have stopped hunting after being involved in ecotourism; few others have purchased saw chains with increased income.
3. Wunder's study is at Cuyabeno Wildlife Reserve, a biodiversity rich area in Ecuador's northern region.
4. Local words are often used wherever possible to avoid technical terminology. Help from two local persons who are also the employees of the national park is taken to facilitate the interview process.
5. Bhitarkanika Management Plan, Mangrove Forest Division (WL), Rajanagar, Kendrapara, Odisha.
6. Retrieved from http://www.iczmpodisha.org/aim_and_objective.htm on 4 June 2015.

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